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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,851	05/10/2007	Milind S. Bhagavat	28744-340 (04-0151)	1290

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EXAMINER

MORGAN, EILEEN P

ART UNIT

PAPER NUMBER

3723

NOTIFICATION DATE

DELIVERY MODE

04/27/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USpatents@armstrongteasdale.com

Office Action Summary	Application No. 10/598,851	Applicant(s) BHAGAVAT ET AL.	
	Examiner Eileen P. Morgan	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4-19-11</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's election without traverse of claims 9-13 in the reply filed on 9-1-10 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14,19,20 rejected under 35 U.S.C. 102(b) as being anticipated by AAPA, Fig 4.

AAPA at [0051-0052] in conjunction with Figure 4, disclose a double-side grinding machine comprising two hydrostatic pads 11' with an opening 41' for a grinder to have access for grinding workpiece held therebetween, the pad body also having pockets (21',23',25',27',29',31') for holding fluid to apply pressure to workpiece held between pads 11' during grinding. Fig 4 shows a free region 32' between the periphery of opening and a pocket. This area does not apply pressure to workpiece since it will not be in contact with workpiece while pockets are filled with fluid applying pressure. During grinding, while pocket is filled, the free region will be recessed from pocket edge. The radial distances from the center of opening to different portions of pocket edge are non-uniform, and are about 1.1 times radius of opening, and a spacing between edge of wheel and pocket edge is at least 0.1 times the radius of opening.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,8, rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (AAPA), alone.

AAPA at [0051-0052] in conjunction with Figure 4, disclose a double-side grinding machine comprising two hydrostatic pads 11' with an opening 41' for a grinder to have access for grinding workpiece held therebetween, the pad body also having pockets (21',23',25',27',29',31') for holding fluid to apply pressure to workpiece held between pads 11' during grinding, wherein pockets 29' and 31' are arcuate in shape and elongate in a generally circumferential direction, the pocket surface area is about 232.36cm² and the ratio of pocket surface area to working surface area is about 0.26. The claims call for 'less than 0.26' ratio and preferably about 0.17, and a pocket surface area less than about 225cm² and 20% below horizontal. However, it would have been obvious to one of ordinary skill in the art at time invention was made modify the pocket size so the ratio would be less than 0.26, around 0.17, the pocket surface area to be about 225cm², and 20% or less below horizontal since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) and furthermore, where the

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general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 5-7 rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Weldon-6,062,959.

In regard to the pockets having injection ports and drain channels, these would be inherent elements of AAPA. In addition, Weldon teaches a hydrostatic pad with fluid pockets having injection ports (650) and drain channels (620) for excess fluid to drain. Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to provide the pockets of AAPA with injection ports and drainage channel, since it is inherent that these elements exist in order to fill pockets with fluid to apply pressure, and further as shown by Weldon, in order to accurately fill cavities with fluid to apply correct amount of pressure.

Allowable Subject Matter

Claims 15-18 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 2-17-11 have been fully considered but they are not persuasive. Regarding claim 14, the 'free region' has no structural limitations except that it is 'free' and that during use applies no pressure to workpiece. However, this is only intended use of the 'free' region, and Fig 4 of AAPA element 32' reads on this free

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region since it applies no pressure in use because the fluid filled pockets will keep that region from applying pressure to workpiece. The structural limitations of claims 15-18 are deemed patentable.

Regarding claims 1-8, the prior art does not necessarily fail to recognize that the ratio of pocket size surface area to working surface area is a result-effective variable. Applicant has not shown where this statement is positively true. Although it might not necessarily say this is a 'result-effective variable' does not mean it is definitely not. In addition, the fact that the entire clamping area is not one huge fluid pocket inherently shows that there is a result-effective variable regarding the amount and size of the clamping fluid pocket(s).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen P. Morgan whose telephone number is 571.272.4488. The examiner can normally be reached on Monday-Thursday, 7am-3:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571.272.4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EM
April 22, 2011

/Eileen P Morgan/
Primary Examiner, Art Unit 3723